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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,519	08/29/2001	Xiaoming Gu	280/50357	5214

7590 02/04/2004
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EXAMINER

WILLIAMS, ERIC M

ART UNIT PAPER NUMBER

3681

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,519

Applicant(s)

GU, XIAOMING

Examiner

Eric M Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-7 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

1. This action is in response to the papers filed 11/25/2003 for serial number 09/940,419.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/03/2003 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Fujioka et al. '944.

Fujioka discloses a wet multiplate clutch comprising plural friction plates (27) and plural separator plates (26), wherein the separator plates are groove free (no grooves are shown or described), wherein between each two friction plates adjacent to each other, at least two of the plural separator plates are disposed (Figure 4 shows two

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separator plates, 26, between adjacent friction plates, 27), and the separator plates are completely separate from each other and can freely move independently of each other (the separator plates of Fujioka are separate and can freely move independent of each other as evidenced in column 3 lines 60-69, wherein it states that oil spreads over the friction surfaces of the driven plates (26).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujioka et al. '944 in view of Yesnik '654.

Fujioka discloses all the limitations of claim 4, but lacks any specific disclosure of the separator plates being coated. Yesnik (Abstract) discloses separator plates being coated Fig. 2 (48) to provide an increased coefficient of friction without increasing the wear. It would have been obvious to one of ordinary skill in the art at the time of this invention to modify the separator plate of Fujioka such that it is coated, in view of Yesnik, for the purpose of providing an increased coefficient of friction without increasing wear.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujioka et al. '944 in view of Ueno et al. JP 405231443A.

Fujioka discloses all the limitations of claim 5, but lacks any specific disclosure of the separator plates being machined. Ueno et al. teaches machining separator plates in a wet multiple disk clutch to improve durability (Constitution). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the separator plates of Bauer such that they are machined, in view of Ueno, to improve the durability of the separator plates and the wet multiple disk clutch.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujioka et al. '944 in view of Avers '035.

Fujioka discloses all the limitations of claim 6, but lacks any specific teaching of the thickness of the groove-free separator plates between .5 and 1.52 mm. Avers discloses a clutch with a separator plate (24a, 24b) having a thickness between .01 and .09 inches - equivalent to .254 mm and 2.286 mm (abstract) -. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the separator plates of Bauer such that the thickness is between .5 and 1.52 mm, in view of Avers, to reduce noise and vibration in the clutch.

Allowable Subject Matter

9. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments with have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Williams whose telephone number is 703-305-0607. The examiner can normally be reached on Mon. - Fri. from 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


EMW

 2/3/04
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Primary Examiner
AU 3681